

**REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

**I. CLAIM STATUS AND AMENDMENTS**

Claims 44-55, 58, 59, 61, 63-65, and 68 remain pending. Claims 44-54 are withdrawn as non-elected subject matter. Claims 55, 58, 59, 61, 63-65, and 68 were examined on the merits and stand rejected.

Claims 53-55, 61, 63-65, and 68 are currently amended. New claim 69 has been added. Support for the amendments and new claim can be found in the specification and original claims as filed. No new matter has been added.

Amended claims 53-55, 61, 63-65, and 68 more clearly define the claimed subject matter, provide more consistent terminology, and correct matters of form. New claim 69 is directed to subject matter previously recited in claim 55.

Applicants gratefully acknowledge the indication in the Office Action, at page 2, item 4, that the prior objections and rejections that are not recited in the present Office Action have been withdrawn.

**II. CLAIM REJECTIONS – 35 USC §112**

At page 3, item 5, the Office Action rejects claims 55, 58, 59, 61, 63-65, and 68 under 35 U.S.C. § 112, first paragraph, on the basis that the specification is enabling for a method for the preparation of transgenic plant having long lasting resistance against geminiviruses by making silent mutations to truncated Rep gene from TYLCSV, but not for making any mutations to truncated Rep gene from TYLCSV having 130 residues from N-terminal of the Rep protein, or any geminivirus-derived sequence encoding an amino acid sequence able to confer resistance against geminiviruses. Applicants respectfully traverse this rejection.

As acknowledged in the Office Action, the specification enables a method for preparing a transgenic plant having long lasting resistance against geminiviruses by making silent mutations to truncated Rep gen from TYLCSV. Currently amended claim 55 is directed to a method for preparing transgenic plants that features making silent point mutations distributed along a selected geminivirus gene-derived sequence. The Office Action has indicated that the specification properly enables claims that feature this limited type of mutated gene sequence.

Currently amended claim 55 is also directed to a method that includes the selection of a geminivirus gene-derived sequence encoding an amino acid sequence capable of conferring resistance against geminiviruses. Amended claim 55 does not

require the identification of such a gene sequence, but only recites the selection of such a sequence. Furthermore, the selected gene sequence is one where the geminivirus resistance can be overcome over time by geminivirus induced transgene silencing mechanism. Contrary to the position stated in the Office Action, the claimed method does not refer to any geminivirus gene-derived sequences. In fact, the geminivirus gene-derived sequences to be selected are only the geminivirus gene-derived sequences encoding amino acid sequences that confer resistance against geminiviruses, that resistance being overcome over time by geminivirus-induced transgene silencing. Such specific sequences, or the methods for recognizing these sequences, are well known to those of ordinary skill in the art. For instance, partial resistance has been found in transgenic plants transformed with geminivirus derived sequences encoding several proteins:

Transgenes derived by AC1/C1/AL1 gene:

- a) Noris et al. Virology 1996 224, 130-138 Begomovirus
- b) Brunetti et al. MPMI 1997 10, 571-579 Begomovirus
- c) Sangarè et al. Molecular Biology Reports 1999 5, 95-102 Begomovirus
- d) Shepherd et al. 2007 Journal of General Virology 88, 325-336 Mastrevirus

Transgenes derived by BC1/BV1 gene

- a) Duan et al. MPMI 1997 10, 617-623 Begomovirus

Transgenes derived from CP

a) Kunik et al. Biotechnology 1994 12, 500-504 Begomovirus

One of ordinary skill in the art could recognize and/or select such a gene sequence. The claimed method allows one to then obtain a new nucleotide sequence having the same codifying capability of the original sequence, but having a different nucleotide sequence in such a way that it is an ineffective target for the virus induced gene silencing mechanism, thereby producing a long lasting resistance against geminiviruses.

For all of these reasons, the specification fully enables a method for the preparation of transgenic plants, plant tissue or cells thereof having long lasting resistance against geminiviruses, as recited in claims 55, 58, 59, 61, 63-65, and 68. Accordingly, each of these claims satisfies the requirements of 35 U.S.C. § 112, first paragraph. Applicants respectfully request reconsideration and withdrawal of the rejection.

**III. CONCLUSION**

Having addressed all the outstanding issues, the amendment is believed to be fully responsive. In view of the above, it is respectfully submitted that the application is in condition for allowance and notice to that effect is hereby requested. If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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